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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:
28 July 2011

(54) Title: WIRELESS POWER TRANSFER FOR LOW POWER DEVICES

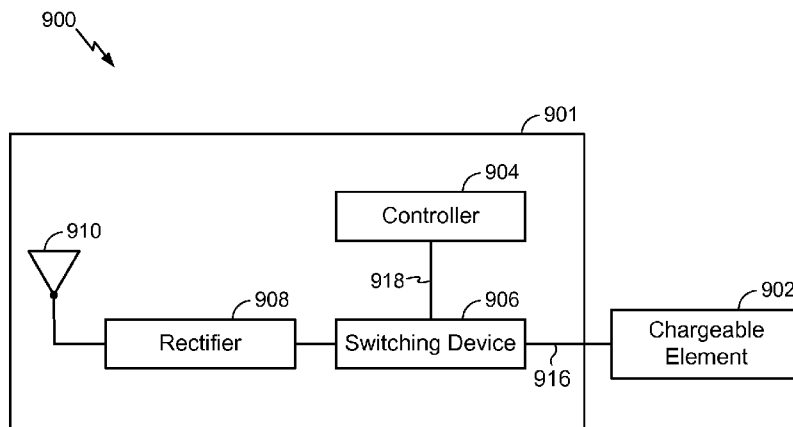


FIG. 19

(57) Abstract: Exemplary embodiments are directed to wireless power transfer. A method of operating a wireless receiver (90) may comprise receiving wireless power with a receive antenna (910) and conveying power from the receive antenna to a chargeable element. The method may further include electrically isolating the receive antenna from the chargeable element upon detecting that the chargeable element is fully-charged.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2010/024154

A. CLASSIFICATION OF SUBJECT MATTER
INV. H02J7/00
ADD.
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
H02J H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/158152 A1 (TANIGUCHI TOSHIO [JP] ET AL) 20 July 2006 (2006-07-20) paragraphs [0014], [0036], [0 39], [0 43], [0 45], [0 46], [0 63] - [0070]; figures 2,3,4	1,4,8, 25,26,29
X	WO 2008/117221 A2 (GILLETTE CO [US]; BOURILKOV JORDAN T [US]; KLEIN DAVID N [US]) 2 October 2008 (2008-10-02) sentence across pages 4, 5; page 5, third paragraph; page 8, second paragraph ; from page 8, line 15 up to page 9, line12; page 16, second paragraph; page 17, second paragraph and last paragraph; figs. 1-3; abstract	1-7,9, 10,25-29

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search 16 May 2011	Date of mailing of the international search report 26/05/2011
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Marannino, M
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2010/024154

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008/315826 A1 (ALBERTH JR WILLIAM P [US] ET AL) 25 December 2008 (2008-12-25) paragraphs [0046] - [0049]; figures 4, 7 -----	25-29
A	US 2008/067874 A1 (TSENG RYAN [US]) 20 March 2008 (2008-03-20) paragraph [0007], fig. 1 -----	25-29
A	WO 03/105308 A1 (UNIV CITY HONG KONG; HUI RON SHU-YUEN) 18 December 2003 (2003-12-18) page lines 20-23; fig. 1; figs. 3, 4, 5 -----	25-29
X	JP 2000 029576 A (TOSHIBA CORP; TOSHIBA COMPUTER ENG) 28 January 2000 (2000-01-28) abstract; figures -----	1,2
X	US 2008/174267 A1 (ONISHI KOTA [JP] ET AL) 24 July 2008 (2008-07-24) the whole document -----	11-24
X,P	US 2009/140692 A1 (HWANG SHI-YOUN [KR]) 4 June 2009 (2009-06-04) paragraphs [0009], [0014], [0030], [0043], [0063], [0 97] -----	1-3,6,7, 25,27,29
X	FR 2 646 035 A1 (DAIMLER BENZ AG [DE]) 19 October 1990 (1990-10-19) the whole document -----	11,13

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2010/024154

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2010/024154

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10, 25-29

A charging device, comprising:
at least one charging region configured to transmit power to one or more electronic devices positioned therein; and a timing device configured for tracking a time duration of a charging period; wherein the charging device is configured to deactivate transmission of power from the at least one charging region when the time duration of the charging period is substantially equal to a desired time duration; and relative method

2. claims: 11-24

A wireless receiver, comprising: a receive antenna selectively coupled to a chargeable element and configured to receive wireless power from a wireless antenna; and a switching device operably coupled between the receive antenna and the chargeable element and configured to electrically isolate the receive antenna from the chargeable element, and relative method
